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Proposed Salado Creek Trail, Lions Park Lake to SE Military Drive, San Antonio, Bexar County, Texas

Mark P. Luzmoor

Kristi Miller Nichols

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Prepared by:
Mark P. Luzmoor
and Kristi Miller Nichols

RABA KISTNER ENVIRONMENTAL

Prepared for:
VICKREY & ASSOCIATES, INC.
12940 Country Parkway | San Antonio, TX 78216

Non-Redacted

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ASF15-197-00

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Management Summary

In December 2015, Vickrey & Associates, Inc. (Client) contracted with Raba Kistner Environmental, Inc. (**RKEI**), to perform an intensive pedestrian survey for a proposed 3.2 mile hike and bike trail along Salado Creek near San Antonio, Bexar County, Texas. The proposed trail is an extension of the existing South Salado Creek Greenway Trail which was installed in 2008. The project is owned by the City of San Antonio. Since the project area is currently owned by a political subdivision of the state, the project falls under the Antiquities Code of Texas as administered by the Texas Historical Commission (THC).

The purpose of the survey was to determine whether historic or prehistoric cultural resources are located within the Area of Potential Effect (APE), and, if so, assess their significance and eligibility for designation as State Antiquities Landmarks (SALs) and for inclusion on the National Register of Historic Places (NRHP). The project was carried out in early January 2016 under Texas Antiquities Permit No. 7516. Dr. Steve A. Tomka served as Principal Investigator. Kristi Nichols served as the Project Archaeologist, and Mark Luzmoor served as field technician.

Several circumstances delayed the completion of the survey. Construction activities for a new apartment complex hindered the survey along the northern portion. During the survey, it was noted that the trail was to be placed on portions of an already laid cart path from the Pecan Valley Golf Club that was in this area from 1963-2012. Furthermore, because the golf course had fill brought in to build up the fairways and greens, no shovel tests or backhoe trenches were placed in these areas. Right-of-Entry issues also delayed progress within the golf course as well. Weather also postponed the survey due to wet and muddy conditions.

One backhoe trench (BHT) and 19 shovel tests (STs) were excavated within the APE. Surface visibility was around 90 percent throughout the APE. No buried or surface-exposed historic or prehistoric materials were encountered during the survey. All documents collected during the course of the project were returned to the **RKEI** Archaeological Laboratory for processing. All project related documents, are permanently housed at the **RKEI** Laboratory. No cultural material was collected over the course of the project.

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Chapter 1: Introduction and Area of Potential Effect

Raba Kistner Environmental (**RKEI**) was contracted by Vickrey & Associates, Inc. (Client), to perform an intensive pedestrian survey for a proposed 3.2 mile hike and bike trail along Salado Creek near San Antonio, Bexar County, Texas. The proposed trail is an extension of the existing South Salado Creek Greenway Trail which was installed in 2008. Since the project area is currently owned by a political subdivision of the state, the project falls under the Antiquities Code of Texas as administered by the Texas Historical Commission (THC). The archaeological survey was conducted under Texas Antiquities Permit No. 7516. Dr. Steve A. Tomka served as the Principal Investigator and Kristi Nichols served as the Project Archaeologist.

The Area of Potential Effect

The Area-of-Potential Effect (APE) is located in San Antonio, Bexar County, Texas. The survey area encompasses a 3.2 mile linear area with a right-of-way (ROW) of approximately 4 meters in width. The project is within the Salado Creek watershed in south-east San Antonio. It is bounded by Lions Park Lake to the north, Pecan Valley Dr. to the west, and SE Military Dr. to the south (**Figure 1-1**). The APE is located on the San Antonio East (2998-113) and Southton (2998-132) 7.5-minute U.S. Geological Survey (USGS) quadrangle maps (**Figure 1-2**). Parts of the APE are located within the floodplain of the Salado Creek.

The pedestrian survey was to have been initiated some two weeks prior to its actual inception. However, heavy and sustained storms in the area prevented the fieldwork from starting. Construction activities for a new apartment complex also impacted the survey along the northern portion. During the survey, it was noted that the trail was to be placed within a portion of the Pecan Valley Golf Club that operated in this area from 1963-2012; therefore no shovel tests were placed in these areas. Right-of-entry issues further stalled the completion of the project.

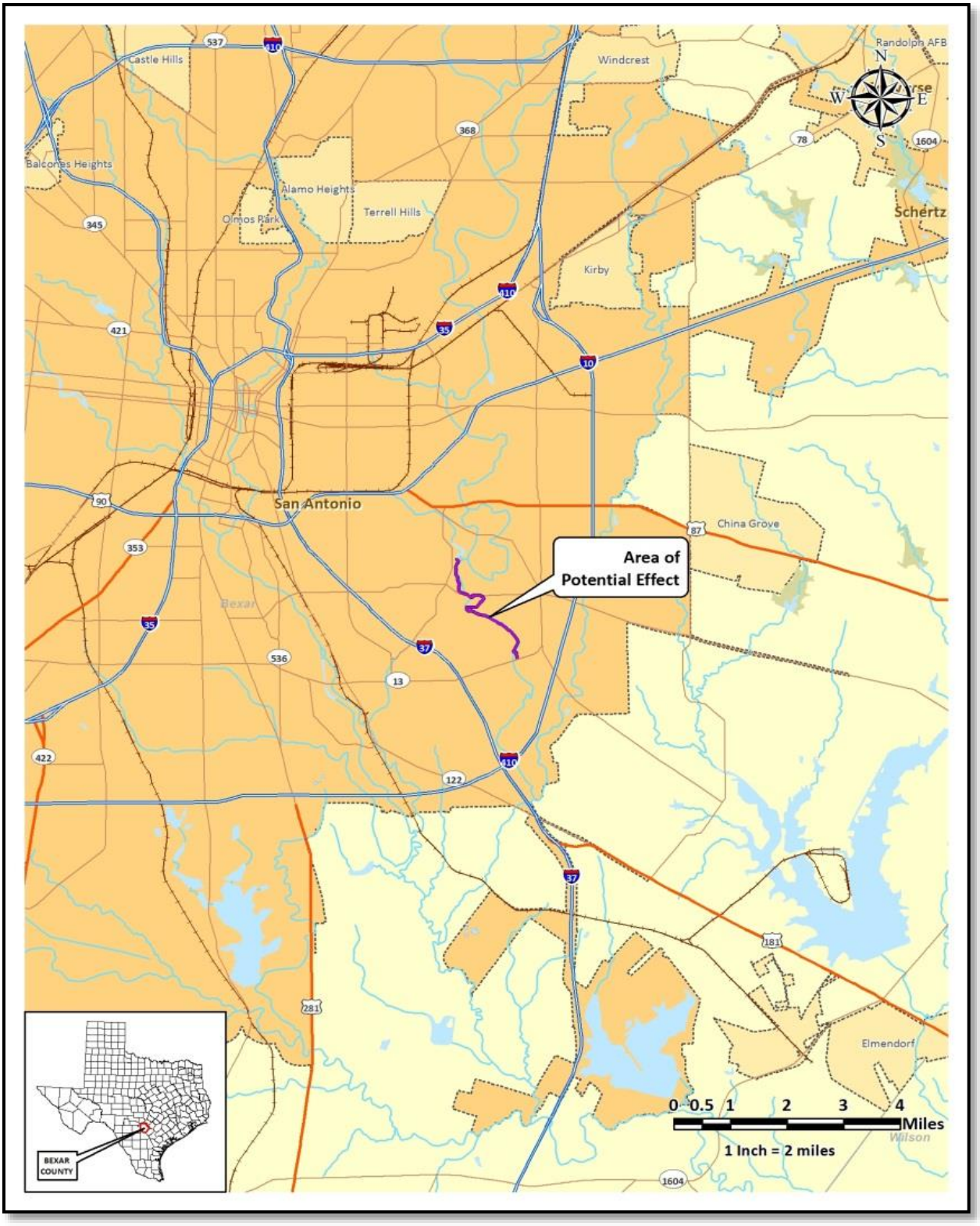

Figure 1-1. Location of APE in San Antonio, Bexar County, Texas.

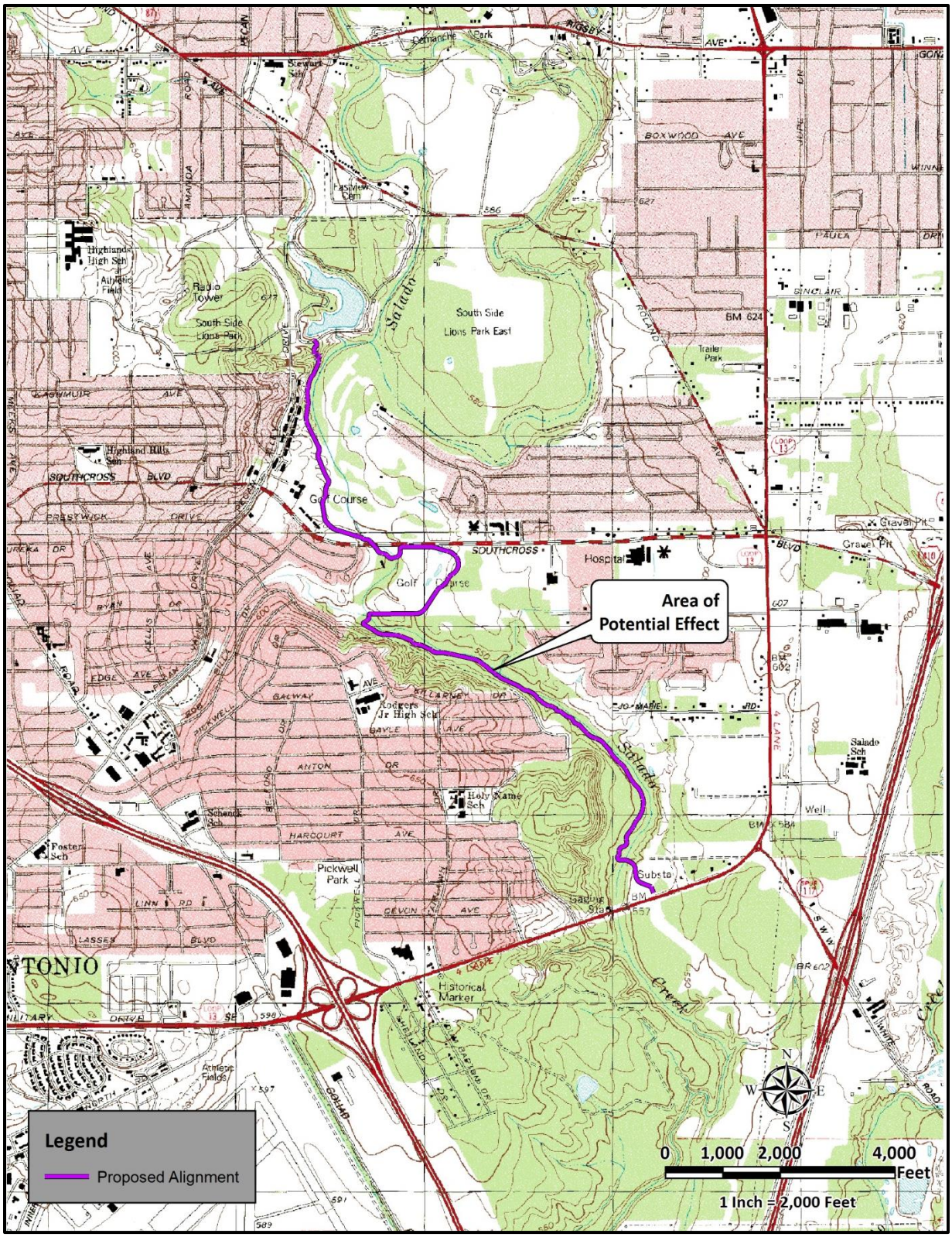

Figure 1-2. The proposed project location as seen on the *San Antonio East* (2998-133) and *Southton* (2998-132) 7.5-minute USGS topographic quadrangle maps in San Antonio, Bexar County, Texas.

Chapter 2: Environmental Setting

Project Area Setting

The project area is located in the geographic region referred to as the Edwards Plateau. The region is bordered by the Blackland Prairie to the east and the Central/Llano Basin to the north. A gently rolling landscape with seasonal drainages dominates the setting. Elevations in the northern part of the project area are approximately 590 ft above mean sea level (amsl) and drop to 560 ft amsl along the southern portion of the APE.

Soils

The APE is within both the Venus-Frio-Trinity and the Lewisville-Houston Black terrace associations (Web Soil Survey 2016). The soils within the Venus-Frio-Trinity association exhibit deep, calcareous soils on bottom lands and terraces; whereas soils within the Lewisville-Houston Black association display deep, calcareous clayey soils in old alluvium. These associations are dominated by three distinct soil types: Houston Clay, Frio Clay Loam, and Venus Clay Loam.

Houston clays have 3-5 percent slopes and are usually severely eroded. Frio Clay Loam soils have 0-1 percent slopes and usually occur on the flood plains of tributary creeks or on low terraces bordering the flood plains. These areas are flooded occasionally, and except for the lowest depressions, all of this soil is well drained. The top 25-30 inches contains a soil that is light brownish grey in color. Below this, the texture ranges between a sandy loam through stratified loam to a clay loam. There are water-rounded limestone gravels between 3 and 6 feet deep. Venus Clay Loam soils have 1-3 percent slopes. The surface layer is approximately 14 inches thick and the subsurface layer is 20 inches thick and is a clay loam in texture but is less clayey than the surface layer (Web Soil Survey 2016).

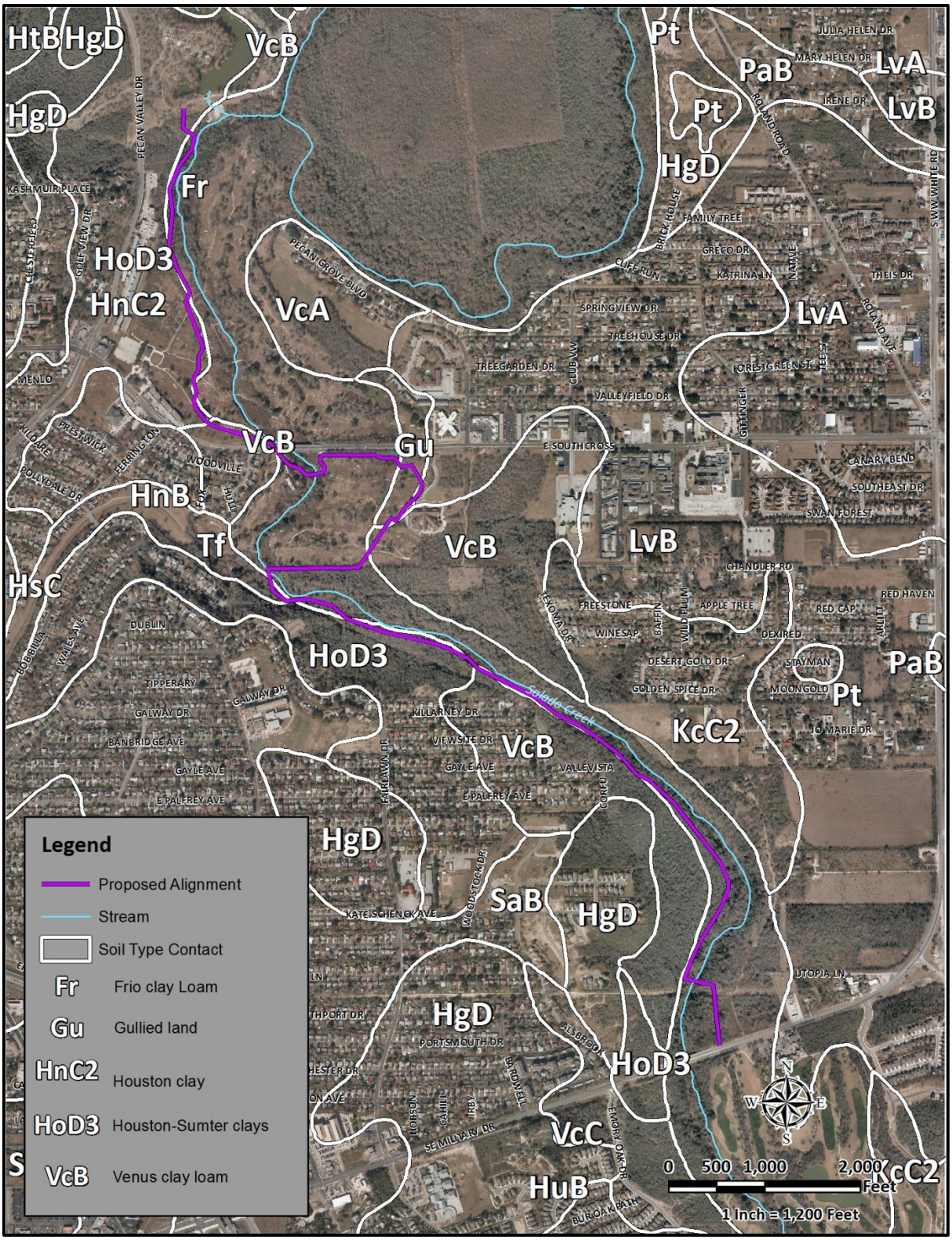

Figure 2-1. Soils map of the APE.

Flora and Fauna

The project area is located near the intersection of the Balconian, Taumaulipan, and Texan biotic provinces (Blair 1950). A diverse number of floral and faunal resources are available from these biotic provinces.

Trees, plants, and grasses in this region include cedar (*Juniperus ashei*), live oak (*Quercus fusiformis*), Texas mountain laurel (*Sophora secundiflora*), mesquite (*Prosopis glandulosa*), prickly pear (*Optunia* sp.), agarita (*Berberis trifoliolata*), cat claw (*Smilax bona-nox*), mustang grape (*Vitis mustangensis*), sotol (*Dasylirion texanum*), and Spanish dagger (*Yucca* sp.).

The fauna that inhabit the South-Central Texas region includes at least 95 bird and 29 mammal species. The area also contains a wide array of reptiles, fish, and amphibians. Mammal species that were noted along the ROW include white-tailed deer (*Odocoileus virginianus*), nine-banded armadillo (*Dasypus novemcinctus*), Virginia opossum (*Didelphis virgininana*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), coyote (*Canis latrans*), and cottontail rabbit (*Sylvilagus audubonii*).

South Texas Climate

The climate in South-Central Texas is humid subtropical with hot and humid summers. From May through September, hot weather dominates with the cool season beginning around the first of November and extending through March. Winters are typically short and mild with little precipitation. San Antonio averages only 33 inches of rain per year (Southern Regional Climate Center [SRCC] 2015; based on monthly averages from 1980 to 2010). Monthly temperature averages range between 52°F in January to 85°F in August.

Geology

The underlying geology of the project area is 100 percent Quaternary-age Fluviatile low-terrace deposits adjacent to Salado Creek (Sellards 1919). These terrace deposits consist predominately of concretionary calcite pebbles, gravel, and loam. Most low terrace deposits along entrenched waterways like Salado Creek are above flood level (Sellards 1919) but they do flood frequently.

Chapter 3: Culture Chronology and Previous Archaeology

Culture Chronology

The cultural history of Bexar County and the vicinity spans approximately 11,500 years. Archaeologists have divided the occupation of the region into four principal periods and several sub-periods: Paleoindian, Archaic, Late Prehistoric, and Historic. The periods are characterized by changes in climatic conditions, distinct vegetation types, structure and concomitant adaptive changes by human populations in hunting and gathering technologies and strategies, general material culture, and at the tail end of the cultural sequence, the arrival of non-indigenous populations. The standard summaries of the culture chronologies of Central Texas accepted by many of the regional archaeologists were produced by Collins (1995) and Prewitt (1981). Below is a brief summary of the cultural sequence that has been reconstructed by archaeologists for the south-central part of the state.

Paleoindian Period

The oldest cultural materials found in the region date to the Paleoindian period. The period spans roughly from 11,500-8800 B.P. (Collins 1995, 2004). The Aubrey site in Denton County has one of the earliest occupations, with radiocarbon assays dating to between 11,542 ± 11 B.P. and 11,590 ± 93 B.P. (Bousman et al. 2004:48). Paleoclimatic proxy measures suggest that a cooler climate with increased precipitation was predominant during the Late Pleistocene (Mauldin and Nickels 2001; Toomey et al. 1993), the later portion of the period.

Initial reconstructions of Paleoindian adaptations typically viewed these hunter-gatherers as traversing extreme distances in pursuit of now extinct mega-fauna such as mammoth and mastodon. While these Paleoindians populations did exploit the Late Pleistocene mega-fauna when it was accessible, faunal assemblages from a larger number of sites indicate that the Paleoindian diet was more varied and consisted of a wide range of resources, including small game and plants. The Lewisville (Winkler 1982) and the Aubrey sites (Ferring 2001) produced faunal assemblages that represented a wide range of taxa, including large, medium, and small species. Information on the consumption of plant resources during the Paleoindian period is lacking. Bousman et al. (2004) reported that the late Paleoindian component at the Wilson-Leonard site reflected the exploitation of riparian, forest, and grassland species. Analysis of Paleoindian skeletal remains indicates that the diets of the Paleoindian and later Archaic hunter-gatherers may have been similar (Bousman et al. 2004; Powell and Steele 1994).

The early portion of the Paleoindian period was characterized by the appearance of Clovis and Folsom fluted projectile points that were used for hunting mega-fauna. Typical projectile points produced at sites with occupations dating to the later portion of the Paleoindian period included the Plainview, Dalton, Angostura, Golandrina, Meserve, and Scottsbluff types. Meltzer and Bever (1995) have identified 406 Clovis sites in Texas. One of the earliest, 41RB1, yielded radiocarbon assays that put the maximum age for the Paleoindian component at 11,415 ± 125 B.P. (Bousman et al. 2004:47).

Sites in Bexar County that contain Paleoindian components include St. Mary's Hall (Hester 1978, 1990), Pavo Real (Collins et al. 2003), the Richard Beene site (Thoms et al. 1996; Thoms and Mandel 2006), and 41BX1396 (Tomka 2012). St. Mary's Hall, 41BX229, was first encountered in 1972 during the construction of a house just outside the school property. The Pavo Real site, 41BX52, is located along Leon Creek in northwest Bexar County. The site was first documented in 1970 and has been investigated several times over the past 40 years (Collins et al. 2003). The Richard Beene site, 41BX831, is located along the Medina River in southern Bexar County (Thoms et al. 1996). Site 41BX1396 is located in Brackenridge Park in San Antonio, and was encountered during installations for lighting in 2010. Dating of organic samples indicated that occupation at the site occurred as early as 10,490-10,230 B.P.

Archaic Period

The Archaic period dates between ca. 8800 to 1200 B.P. It is divided into three sub-periods: Early, Middle, and Late. During the Archaic, mobility strategies may have shifted to more frequent short distance movements that allowed the exploitation of seasonal resource patches. The intermittent presence of bison in parts of Texas combined with changes in climatic conditions and the primary productivity of the plant resources may have contributed to shifts in subsistence strategies and associated technological repertoire. When bison was not present in the region, hunting strategies focused on medium to small game along with continued foraging for plant resources. When bison was available, hunter-gatherers targeted the larger-bodied prey on a regular basis.

Early Archaic

The Early Archaic spans from 8800 to 6000 B.P. (Collins 1995). Projectile point styles characteristic of the Early Archaic include Angostura, Early Split Stem, Martindale, and Uvalde (Collins 1995). The Early Archaic climate was drier than the Paleoindian period and witnessed a return to grasslands (Bousman 1998). Mega-fauna of the Paleoindian period could not survive the new climate and ecosystems, therefore eventually died out. Early Archaic exploitation of medium to small fauna intensified.

The Wilson-Leonard excavation produced a wealth of cultural materials representative of a lengthy period in regional prehistory. The projectile point assemblages from the site indicate that the lanceolate Paleoindian point forms continue from the Paleoindian into the Early Archaic (Angostura). However, relatively quickly during the Early Archaic, they are replaced by corner- and basally-notched and shouldered forms (Early Triangular, Andice, Bell) that quickly become the dominant points tipping the atlatl-thrown darts. In addition, the uses of small to medium hearths similar to the previous period were noted too. The appearance of earth ovens suggests another shift in subsistence strategies. The earth ovens encountered at the Wilson-Leonard site were used to cook wild hyacinth along with aquatic and terrestrial resources (Collins et al. 1998). Analyses of Early Archaic human remains encountered in Kerr County (Bement 1991) reveal diets low in carbohydrates in comparison to the Early Archaic populations found in the Lower Pecos region.

Within Bexar County, the excavations at 41BX1396 revealed an Early Archaic component, radiocarbon dated to cal B.P. 8390 to 8180 (Tomka 2012).

Middle Archaic

The Middle Archaic sub-period spans from 6000 to 4000 B.P. (Collins 1995). Archaeological data indicates that there appeared to be a population increase during this time. Climate was gradually drying leading to the onset of a long drought period. Changes to the demographics and cultural characteristics were likely in response to the warmer and more arid conditions (Robinson 1982). Projectile point styles characteristic of this sub-period include Bell, Andice, Calf Creek, Taylor, Nolan, and Travis.

Subsistence during the Middle Archaic saw an increased reliance on nuts and other products of riverine environments (Black 1989). The increase of burned rock middens during the Middle Archaic represented the increased focus on the use of plant resources (Black 1989; Johnson and Goode 1994). Little is known about burial practices during the Middle Archaic. An excavation in an Uvalde County sinkhole (41UV4) contained 25-50 individuals (Johnson and Goode 1994:28).

Late Archaic

The Late Archaic spans from 4000 to 1200 B.P. (Collins 2004). It is represented by the Bulverde, Pedernales, Kinney, Lange, Marshall, Williams, Marcos, Montell, Castroville, Ensor, Frio, Fairland, and Darl projectile points. The early part of the Late Archaic exhibited fluctuations in the temperature and rainfall. There appears to have been an increase in population at this time (Nickels et al. 1998).

Some researchers believe that the use of burned rock middens decreased during the Late Archaic. Some

research has challenged this notion (Black and Creel 1997; Mauldin et al. 2003). Johnson and Goode (1994) discuss the role of burned rock middens in relation to acorn processing.

Human remains from burials related to the Late Archaic in Central and South Texas suggest the region saw an increase in population. This increase may have prompted the establishment of territorial boundaries which resulted in boundary disputes (Story 1985). Human remains dating to this sub-period have been encountered near the Edwards Plateau.

Late Prehistoric Period

The Late Prehistoric period begins ca. 1200 B.P. (Collins 1995, 2004), and appears to continue until the beginning of the Protohistoric period (ca. A.D. 1700). The term Late Prehistoric is used in Central and South Texas to designate the time following the end of the Archaic Period. A series of traits characterizes the shift from the Archaic to the Late Prehistoric period. The main technological changes were the shift to the bow and arrow and the introduction of pottery. The Late Prehistoric period is divided into two phases: the Austin phase and the Toyah phase.

At the beginning of this period, environmental conditions were deemed to be warm and dry. Moister conditions appear after 1000 B.P. (Mauldin and Nickels 2001). Subsistence practices appeared similar to the Late Archaic. Projectile points associated with the Austin phase include the Scallorn and Edwards types. The Toyah phase is characterized by the prominence of the Perdiz point (Collins 1995).

Most researchers concur that the early portion of the Late Prehistoric period saw a decrease in population density (Black 1989:32). Radiocarbon dates from some sites have indicated that the middens were utilized during the Late Prehistoric. Some archaeologists feel the peak of midden use was after A.D. 1 and into the Late Prehistoric (Black and Creel 1997:273). Radiocarbon dates from Camp Bowie middens provide evidence that supports Black and Creel's arguments that burned rock middens were a primarily Late Prehistoric occurrence (Mauldin et al. 2003).

Beginning rather abruptly at about 650 B.P., a shift in technology occurred. This shift is characterized by the introduction of blade technology, the first ceramics in Central Texas (bone-tempered plainwares), the appearance of Perdiz arrow points, and alternately beveled bifaces (Black 1989:32; Huebner 1991:346). Prewitt (1981) suggests this technology originated in North-Central Texas. Patterson (1988), however, notes that the Perdiz point was first seen in Southeast Texas by about 1350 B.P., and was introduced to West Texas some 600 to 700 years later.

Early ceramics in Central Texas (ca. A.D. 1250 to 1300) are associated with the Toyah phase of the Late Prehistoric and are referred to as Leon Plain ware. The Leon Plain ceramic types are undecorated, bone-tempered bowls, jars, and ollas with oxidized, burnished, and floated exterior surfaces (Ricklis 2004). There is notable variation within the type (Black 1986; Johnson 1994; Kalter et al. 2005). This variation can be attributed to differences in manufacturing techniques and cultural affiliation. Analysis of residues on ceramic sherds suggests that vessels were used to process bison bone grease/fat, mesquite bean/bison bone grease, and deer/bison bone grease (Quigg et al. 1993).

The return of bison to South and Central Texas during the Late Prehistoric resulted from a drier climate in the plains located to the north of Texas and increased grasses in the Cross-Timbers and Post Oak Savannah in North-Central Texas (Huebner 1991). The increased grasses in the two biotas formed the "bison corridor" along the eastern edge of the Edwards Plateau and into the South Texas Plain (Huebner 1991:354-355). Rock shelter sites, such as Scorpion Cave in Medina County (Highley et al. 1978) and Classen Rock Shelter in northern Bexar County (Fox and Fox 1967), have indicated a shift in settlement strategies (Skinner 1981). Burials encountered that dated to this period often reveal evidence of conflict (Black 1989:32).

Historic Period

The beginnings of San Antonio came about with the establishment of Mission San Antonio de Valero in 1718. Fray Antonio de San Buenaventura y Olivares had briefly visited the site several years prior, and petitioned to set up a mission at the headwaters of the San Antonio River to act as a waypoint in the journey to East Texas. The Marques de Valero, Viceroy of New Spain, granted Olivares' request and granted him permission (de la Teja 1995). Mission Valero occupied at least two locations before it settled into its current spot. The final location was in use by 1724.

Five days after Mission Valero was founded, Presidio de Bexar was established. The presidio was to house the Spanish soldiers who had come along with the expedition to found the Mission. Typically, the families that followed the soldiers lived just outside the presidio.

Two years later, in 1720, Mission San José y San Miguel de Aguayo was established on the opposite bank of the San Antonio River, and to the south of Mission Valero and Presidio San Antonio de Bexar. This mission was established to help serve native groups that did not want to reside at Mission Valero because they were not on friendly terms with groups already living there. The original location of Mission San José was along the east bank of the San Antonio River, approximately three leagues from Mission Valero. The

mission was then moved to the opposite bank sometime between 1724 and 1729, and relocated to its present site during the 1740s due to an epidemic (Scurlock et al. 1976:222).

In 1722, just two years after Mission San José was founded, Mission San Francisco Xavier de Nàjera was established. The mission was to serve a group of 50 Ervipiami families that came from the Brazos River area (Schuetz 1968:11). Mission San Francisco Xavier de Nàjera was located on or near the present site of Mission Concepción. The mission was unsuccessful due to a lack of funding. An attempt was made to make the mission a sub-mission of Valero, but this failed as well (Habig 1968:78-81). Its doors closed in 1726 (Schuetz 1968:11). Ivey (1984:13) argued that the closure of the mission was due to the natives' lack of interest in entering mission life.

Within the next few years, four other missions were established within the San Antonio area. The remaining three missions were established in San Antonio within weeks of each other in 1731. These three missions, Mission Nuestra Señora de la Purisima Concepción, Mission San Juan de Capistrano, and Mission San Francisco de la Espada, were originally missions established in east Texas. When each failed along the eastern border, they were moved to San Antonio.

In addition to the five missions, the civilian community outside of the mission and presidio, Villa San Fernando de Bexar was established by the Canary Islanders. Prior to the establishment of Villa San Fernando, Villa de Bexar had been settled by 30 presidial soldiers, seven of whom were married and brought their families. Archival research indicates that upon arrival, the Canary Islanders immediately took over the land surrounding the garrison. This land was used as pasture and was originally property of Mission Valero. There had been a lack of cleared agricultural land at the time, leading Captain Juan Antonio Pérez de Almazán to allow the Canary Islanders use of the property (de la Teja 1995). The initial plan was for additional Canary Island settlers to be sent to San Antonio after the first group was established. Due to high costs to the Spanish Crown, no more groups were brought to Texas. The Canary Islanders launched a formal complaint against Mission Valero. In 1731, the Canary Islanders established their own villa, named San Fernando de Bexar, with their own church. The arrival of the *Isleños* resulted in the first clearly defined civilian settlement in San Antonio.

During the early years of the Villa de Bexar, no formal titles were issued as the property was distributed. If a presidial soldier and his family occupied the property, they likely did not own it (de la Teja 1995). Prior to 1731, soldiers and settlers were issued licenses to build houses on and farm the land surrounding the garrison. The area was considered the royal property of the presidio (Ivey 2008).

During the early years of the Villa de Bexar and San Fernando de Bexar, the property that was granted to the *Isleños* after 1745 and the settlers changed hands several times. The *Isleños* requested more property in the Labores, and attempted to hinder the original settlers from obtaining any more land. Though their efforts were not entirely successful, they did slow the amount of property given to the settlers (de la Teja 1995). As grants were passed out, it appears that the *Isleños* would sell their original grants to incoming settlers, or current non-*Isleño* inhabitants, then request an additional grant from the government. By the 1800s, seven families had control of approximately half of the *suertes* that had been distributed during the mid- to-late 1700s (de la Teja 1995).

Previous Archaeological Investigations in the Vicinity of the APE

Several archaeological investigations have been conducted in the Salado Creek area. However, only two investigations fall within the APE (**Figure 3-1**). The West Salado Creek Outfall project was conducted by the University of Texas at San Antonio's Center for Archaeological Research (UTSA-CAR) in two phases in 1988. During the Phase I survey of the area, a prehistoric site composed of lithic tools and burned rock was identified. The site, 41BX785, consisted of lithic debitage and burned rock fragments found in the shovel tests and on the surface. The site was recommended for further investigation before construction (Burkett and Huebner 1989). Later in the year, the second phase of the project focused on examining the site. Investigations revealed that the subsurface portion of the prehistoric site was intact; two stratified occupation levels were identified. No diagnostic cultural materials were recovered during the investigation. A notable amount of lithic debitage was recovered in the central area of the site, as well as unidentified biface fragments and burned rock. The burned rock was believed to be displaced hearth stones (Burkett 1989). Site 41BX785 was recommended for mitigation as it was located within the pipeline easement. The site was considered potentially eligible for listing in the National Register of Historic Places (NRHP) and as a State Antiquities Landmark (SAL).

The other survey that was conducted within close proximity to the current APE was done in 2012 by UTSA-CAR. UTSA-CAR was contracted by HomeSpring Realty Partners to conduct an intensive pedestrian survey of a 13.1 acre area. This survey area was immediately adjacent to the current project area within the old Pecan Valley Golf Club. During the course of the survey, eight shovel tests and seven backhoe trenches were excavated to search for cultural deposits before the construction of new apartments could take place. As a result of the survey, one piece of debitage and one piece of burned rock was encountered in a backhoe trench and one piece of debitage was encountered in a shovel test that was 8 meters away from the backhoe trench. Even though these two positive units would define an archaeological site, UTSA-

CAR determined that the deposits in which the artifacts were found in were very sparse and that they were encountered in a secondary context. Therefore, UTSA-CAR recommended to not formally define the two positive units as a site (Blomquist 2013).

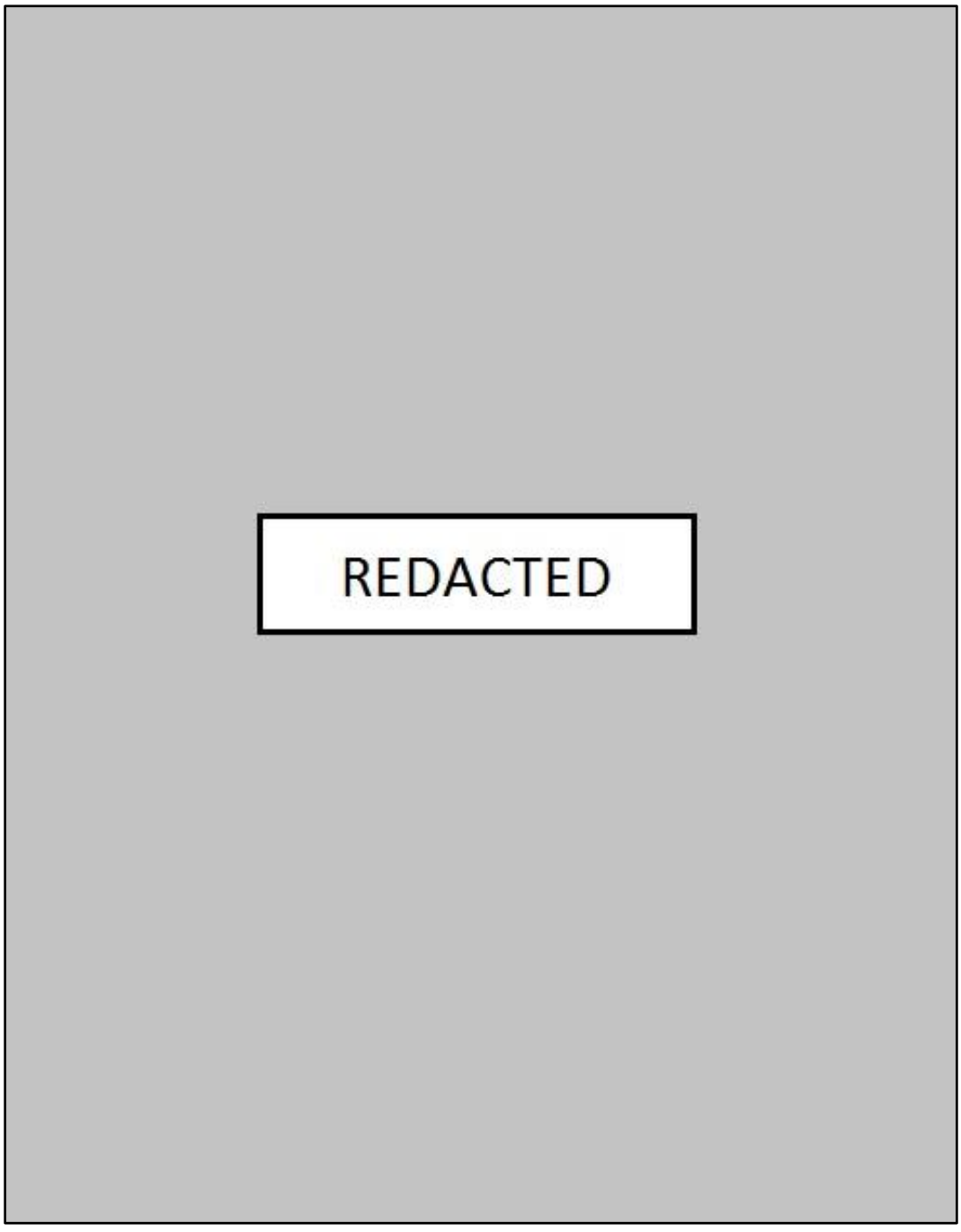

Figure 3-1. Archaeological surveys and sites located within a 1-km radius of the APE.

In 1972, Anne Fox recorded a collection of artifacts on the surface (41BX176) approximately 0.8 km to the southeast of the APE. These artifacts included human bone fragments (at least three individuals, both child and adult), mussel shell, two Scallorn points, and a shell pendant with punctate design. The site was thought date between Archaic and early Neo-Historic. This collection of artifacts was thought to have been the work of pot-hunters. Since protection of the site was clearly impossible, Fox suggested that it should be examined for more burials, but the landowner was resistant to the idea.

In 1977, UTSA-CAR conducted a survey for the Environmental Protection Agency (EPA) along a portion of Salado Creek. During the survey, site 41BX361 was recorded as a multicomponent site. The prehistoric material encountered at the site included a lithic scatter, burned rock, scrapers, an untyped projectile point tip, a base of an untyped point, cores, bifaces, shell(snail and mussel), and faunal material. The historic component consisted of two glass bottles; one was green glass with medicine measurements (THC 2016).

Another site recorded during the 1977 survey was 41BX362. The site consisted of a lithic scatter with cores, scrapers, and crude bifaces noted during the surface inspection. Although the site was disturbed by erosion, it appeared to be in good condition. The site was not recommended for further work (THC 2016).

In 1983, UTSA-CAR conducted the San Antonio Wastewater Facilities archaeological investigation parallel to Salado Creek. During the survey, site 41BX595 was recorded as a possible historic structure and prehistoric lithic scatter. The structure was described as constructed of cut stone blocks with a possible slate roof. Another site, 41BX596, was recorded during the survey. Site 41BX596 was described as a small amount of lithic debris, rabdotus snail shells, fresh water mussel shell fragments, and burned rock fragments. No collections were made and the site was not recommended for further work (THC 2016).

In 2007, UTSA-CAR conducted an intensive pedestrian archaeological survey along the Southern portion of Salado Creek. The work was conducted in advance of construction of a multi-use greenway trail between Rigsby Avenue to South Side Lions Park East along Salado Creek proposed by the Parks and Recreation Department of the City of San Antonio. An intensive pedestrian survey was conducted along the area to be impacted by the proposed trail. One archaeological site, 41BX1756, was recorded during the course of the project. The multicomponent site consisted of the remains of a house, as well as lithic debitage recovered from shovel testing. UTSA-CAR recommended that the site be avoided although it retained no archaeological significance. The site was determined to be ineligible for listing in the NRHP or as a SAL (Kemp and Moses 2008).

In December 2009, Prewitt and Associates, Inc. conducted an archaeological survey for proposed improvements at South Side Lions Park in the City of San Antonio, Texas. The archaeological survey examined the footprints of the proposed facilities and improvements. During the survey, site 41BX1857 was recorded along the western edge of the park. Surface inspection revealed gravels mixed with cores and flakes; artifacts associated with lithic reduction. The site is thin and exposed on an upland surface, and like most of the park, is very disturbed. Site 41BX1857 was recommended as ineligible for designation as a SAL (McWilliams and Kibler 2009).

In 2014, Prewitt and Associates, Inc. conducted an archaeological survey for the proposed District 3 community center at South Side Lions Park in San Antonio, Texas. The investigation found that much of the project area had been disturbed by previous construction and landscaping within the park boundaries. One archaeological site was recorded during the survey, 41BX2037. The site was identified as a prehistoric lithic scatter, although the scatter was ephemeral and disturbed. Site 41BX2037 was recommended as ineligible for listing in the NRHP and designation as a SAL as it possessed little archaeological significance. The proposed improvements at the park were recommended to proceed as planned.

In May of 2014, UTSA-CAR conducted an intensive pedestrian survey for the University of Incarnate Word. Two archaeological sites were recorded during the survey, 41BX2065 and Field Site 1. Site 41BX2065 consisted of lithic debitage and burned rock that was present on the surface. No tools or diagnostic artifacts were encountered during shovel testing or backhoe trenching. Deposits at the site were of extremely low density and backhoe trenching did not reveal any deeper, increased density deposits. No cultural features or temporal diagnostics were recovered. Field Site 1 is a prehistoric site located at the southern edge of the project area north of the golf course. The site is defined by two positive shovel tests located within 30 meters of one another, containing one piece of lithic debitage and one piece of burned rock. Backhoe trenching in the area did not reveal any deeper deposits.

On August 8, 2014, Prewitt and Associates, Inc. conducted an archaeological survey for a proposed pedestrian trail and park facilities area in South Side Lions Park in San Antonio, Texas. The survey did not encounter any archaeological materials and determined that proposed trail and facilities areas have been disturbed by landscape modifications, illegal dumping, and erosion. Therefore, the project area has no potential for archaeological sites eligible for listing in the NRHP or designation as a SAL. Hence, no further archaeological work is recommended.

Chapter 4: Field and Laboratory Methodology

Field Methods

As part of the intensive pedestrian survey of the APE, **RKEI** utilized a combination of surface reconnaissance, shovel testing to search for shallowly buried archaeological deposits, and limited backhoe trenching to identify cultural deposits that were potentially buried below the reach of the typical shovel testing: 60 cm below surface (cmbs).

Shovel Testing

The archaeological survey consisted of a pedestrian survey of 100 percent of the project APE. The pedestrian survey was accompanied by shovel testing at intervals along the ROW. All shovel tests were approximately 30 cm in diameter and, unless prevented by obstacles or buried features, extended to a depth of 60 cmbs. Each shovel test was excavated in 10-cm increments. All soil from each level was screened through 1/4-inch hardware cloth. Any encountered artifacts recovered were to be labeled with appropriate provenience information for laboratory processing and analysis. A shovel test form was completed for each excavated shovel test. Data collected from the shovel test included the final excavation depth, a tally of all materials encountered from each 10-cm level, and a brief soil description (texture, consistency, Munsell color, inclusions). The location was recorded using a Garmin, hand-held, GPS unit. Shovel test locations were sketched onto a current aerial photograph of the APE as a backup to the GPS information. Any additional observation considered pertinent was included as comments on the standard shovel test excavation form.

Backhoe Trenching

One backhoe trench (BHT) was excavated once the initial pedestrian survey was completed and the Project Archaeologist established a high probability location within the APE.

The trench was 4 meters in length and was 0.7 meters wide to allow ease of access. The trench did not exceed 1.5 meters in depth. A representative segment of one trench wall was cleaned for observation and documentation. The cleared wall was photographed with a scale, and a detailed profile drawing was made of the soil strata observed. Any artifacts noted in the representative trench wall segment were to be shown on the profile. Only temporally diagnostic materials were to be collected from the backhoe trenches.

Laboratory Methods

All project-related documentation produced during the survey was prepared in accordance with federal regulation 36 CFR Part 79, and THC requirements for State Held-in-Trust collections. Field notes, field forms, photographs, and field drawings were placed into labeled archival folders and converted into electronic files. Digital photographs were printed on acid-free paper, labeled with archivally appropriate materials, and were placed in archival-quality plastic sleeves when needed. All field forms were completed with pencil. Ink-jet produced maps and illustrations were placed in archival quality plastic page protectors to prevent against accidental smearing due to moisture. A copy of the report and all digital materials was saved onto a CD and stored with field notes and documents. Since no artifacts were encountered during the course of the project, no cultural material was curated. All project-related documentation is permanently housed at The Texas Archaeological Research Laboratory.

Chapter 5: Results of Investigation

The archaeological pedestrian survey was conducted over the course of several days due to the issues mentioned previously. On January 6 and 11, 2016, **RKEI** staff excavated 19 shovel tests (STs) along the course of the proposed hike and bike trail to search for shallowly buried cultural deposits (**Figure 5-1**). These shovel tests were placed in areas that had not been previously disturbed either by the installation of the golf course or the construction of the new apartments that were being installed during the course of the survey (**Figure 5-2**). **RKEI** staff then monitored the excavation of a single backhoe trench (BHT) on January 20, 2016 (see **Figure 5-1**). This trench was placed near the southernmost crossing of the hike and bike trail on the second terrace above Salado Creek so that it was above the flood plain of the creek. The trench was also placed in an area where a bridge was to be constructed for the hike and bike trail. This area had been heavily inundated with the recent rains and was difficult to access (**Figure 5-3**).

No other trenches were excavated near the northern or middle creek crossings due to a number of reasons. The area near the crossing just south of E. Southcross Dr. (see **Figure 3-1**) had been heavily developed by the Pecan Valley Golf Club and the soil on both sides of the creek contained imported fill. Right-of-Entry (ROE) access into the golf course also hindered the progress of the project. Also, the trail crossing planned within the golf course has a bridge currently in place. Trail designs will not affect outside of the current bridge footprint. The creek crossing just north of Killarney Dr. contained imported fill. Both of these crossings were located within the creek's flood plain.

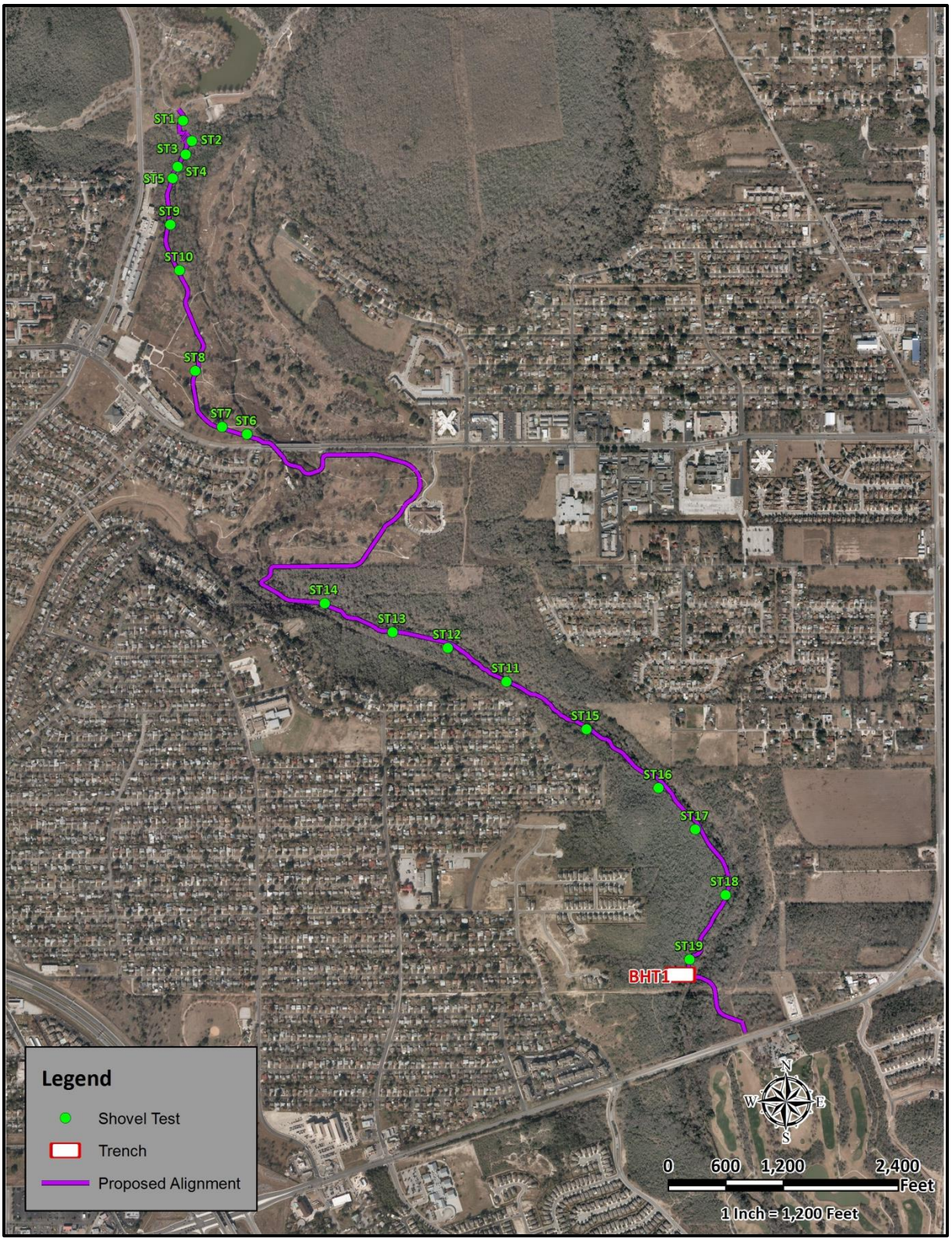

Figure 5-1. Locations of the shovel tests and backhoe trench within the project area.

Figure 5-2. New apartment buildings being constructed immediately west of the proposed hike and bike trail.

Figure 5-3. Heavily inundated area immediately south of BHT 1.

Pedestrian Survey and Shovel Testing

Nineteen shovel tests were excavated during the course of the project (see **Figure 5-1**). None of the shovel tests contained cultural material. The soil in each shovel test ranged in color between a very dark greyish brown (10YR3/2) and a reddish brown (2.5YR5/4) (Table 5-1). Soil texture ranged between saturated clay and dry/course silty clay.

Table 5-1. Shovel Tests with Munsell Colors. *=Disturbed Level.

Shovel Test #	0-10 cmbs	10-20 cmbs	20-30 cmbs	30-40 cmbs	40-50 cmbs	50-60 cmbs
1	10YR4/2	10YR4/2	10YR4/2	10YR4/2	10YR5/6	10YR5/6
2	10YR4/3	10YR4/3	10YR4/3	10YR5/4	10YR5/4	10YR5/4

3	10YR4/2	10YR4/2	10YR4/2	10YR4/2	10YR4/2	10YR4/2
4	10YR4/2	10YR5/4	10YR6/4	10YR6/4	10YT6/4	10YR6/4
5	10YR4/2	10YR4/2	10YR5/2	10YR5/3	10YR5/3	10YR5/3
6	10YR3/1	10YR3/1	10YR5/2	10YR6/4	10YR6/4	10YR6/4
7	10YR4/3	10YR4/3	10YR5/3	10YR6/4	10YR6/4	10YR6/4
8	10YR4/1*	10YR4/1*	10YR4/1*	10YR4/1*	10YR4/1*	10YR4/1*
9	10YR3/1*	10YR3/1*	10YR4/1*	10YR4/2*	10YR4/2*	10YR4/2*
10	10YR4/2	10YR4/2	10YR4/2	10YR4/2	10YR4/2	
11	2.5YR4/1*	10YR3/2	10YR3/2	10YR3/2	10YR3/2	10YR3/2
12	10YR3/3	10YR3/6	10YR4/3	10YR4/3	10YR4/3	10YR4/3
13	10YR3/2*	10YR4/2*	2.5YR5/4	2.5YR5/4	2.5YR5/4	2.5YR5/4
14	10YR3/3	10YR4/3	10YR5/4	10YR5/4	10YR5/4	10YR5/4
15	10YR3/2	10YR3/2	10YR3/2	10YR3/2	10YR3/2	10YR3/2
16	10YR4/3	2.5Y3/3	2.5Y4/3	2.5Y4/3	2.5Y4/3	2.5Y4/3
17	10YR3/2	10YR3/2	10YR3/2	10YR4/2	10YR4/3	10YR4/3
18	10YR4/3	10YR4/3	10YR4/3	10YR4/3	10YR4/3	10YR4/3
19	10YR3/2	10YR3/2	10YR3/2	10YR3/2	10YR3/2	10YR3/2

All but one ST reached the designated depth of 60 cmbs. The ST that did not reach 60 cmbs (ST 10) encountered water at 45 cmbs and was halted after it reached 50 cmbs. Several other STs (ST 8, 9, 11, and 13) contained disturbed levels. In ST 8, construction material was encountered throughout the entire shovel test. These materials were most likely part of the fill that was brought in to build up the golf course. STs 11 and 13 were placed within an established trail that ranged from 2.5-4 meters in width. Shovel tests indicated that only the top levels were disturbed from the constant foot and vehicle traffic along this trail. It should also be noted that the trail was not formally constructed with a gravel or caliche base. Also, this trail had been created and modified by local residents. It was used as an ATV and bike course and had areas that were used as a dump. Finally, there were multiple drainages into the creek that cut into the terrain.

Backhoe Trenching

Once the pedestrian survey and shovel testing was completed, locations for backhoe trenches were determined. To search for deeply buried deposits within the APE, a backhoe trench was excavated along

the far southern portion of the project area where a bridge is proposed to be constructed across Salado Creek (see **Figure 5-1**).

BHT 1 was excavated approximately one hundred feet to the west of Salado Creek. It was placed on the second terrace above Salado Creek in an attempt to be out of the flood plain. The trench was 4 meters long, 0.7 meters wide and 1.5 meters deep. There were four major depositional zones within the trench (**Figures 5-4 and 5-5**). Zone 1 consisted of a very dark grayish brown (10YR3/2) sandy loam humus layer from 0 to 67 cmbs. Zone 2 was a lighter dark greyish brown (10YR4/2) sandy loam that extended to 82 cmbs. Zone 3 was comprised of a brown (10YR5/3) loamy sand and 65 percent calcium carbonates. Zone 4 was a slightly darker brown (10YR4/3) and contained no calcium carbonates. The consistency of the soil was extremely soft from 0 to 82 cmbs, and it became much harder and coarser from 82 to 150 cmbs. No cultural material was encountered in the backdirt from the excavation of BHT 1 or within the profile of the wall after it was cleaned.

Figure 5-4. Photo of north wall of BHT 1.

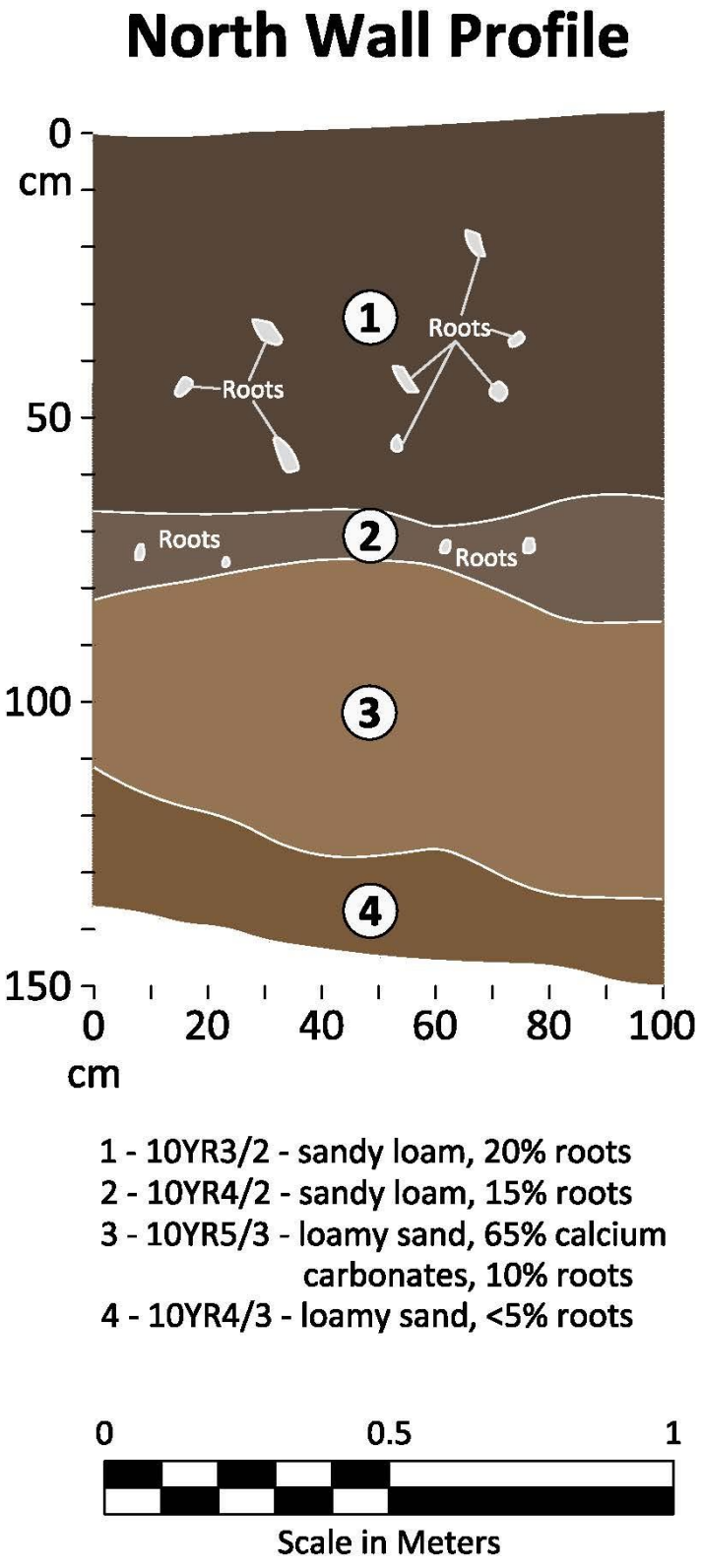

Figure 5-5. North wall profile of BHT 1

Chapter 6: Summary and Recommendations

In December 2015, Vickrey & Associates, Inc. (Client), contracted with **RKEI** to perform an intensive pedestrian survey for a proposed 3.2 mile hike and bike trail along Salado Creek near San Antonio, Bexar County, Texas. The proposed trail is an extension of the existing South Salado Creek Greenway Trail which was installed in 2008. Due to multiple rain events, the survey did not begin until early January 2016. As a part of the intensive pedestrian survey of the APE, **RKEI** utilized a combination of surface reconnaissance, shovel testing, and limited backhoe trenching to search for buried cultural deposits across the APE.

A 100 percent pedestrian survey was conducted along the entire length of the APE that included shovel testing throughout a 3.2 mile corridor project area and backhoe trenching near the southern creek crossing. Surface visibility was 90 percent throughout this area. Multiple drainages into the creek caused erosional cuts into the terrain along the southern edge of the APE. The already existing trail had been created and heavily modified by local residents. It was used as an ATV and bike course, as well as areas that were used as a dump.

A total of 19 shovel tests and one backhoe trench was excavated during the survey to search for shallow and deeply buried cultural deposits within the 3.2 mile corridor. No surface exposed or buried historic or prehistoric materials were identified during the survey.

The lack of historic or prehistoric cultural material located during the survey and backhoe trenching of the APE indicates that there is a low probability that the area contains significant buried historic or prehistoric deposits. **RKEI** recommends that no further archaeological investigations are warranted, and the planned improvements can proceed as scheduled. Should changes be made to the project APE, further work may be required.

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